

Polarized seismic and solitary waves run-up at the sea bed

Abstract :

The polarization effects in hydrodynamics are studied. Hydrodynamic equation for the nonlinear wave is used along with the polarized solitary waves and seismic waves act as initial waves. The model is then solved by Fourier spectral and Runge-Kutta 4 methods, and the surface plot is drawn. The output demonstrates the inundation behaviors. Consequently, the polarized seismic waves along with the polarized solitary waves tend to generate dissimilar inundation which is more disastrous.